

Ser. No. 10/657,714

Docket No. 1293.1853

REMARKS**INTRODUCTION:**

In accordance with the foregoing, claims 1, 36 and 38 have been amended, and claim 37 has been cancelled without prejudice or disclaimer. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-7, 9-14, and 36, 38-41 are under consideration. Claims 15-35 are withdrawn. Reconsideration is respectfully requested.

ENTRY OF RESPONSE UNDER 37 C.F.R. §1.116:

Applicants request entry of this Rule 116 Response and Request for Reconsideration because:

(a) It is believed that the amendments of claims 1, 36 and 38 put this application into condition for allowance;

(b) the amendments were not earlier presented because the Applicants believed in good faith that the cited prior art did not disclose the present invention as previously claimed;

(c) the amendments of claims 1, 36 and 38 should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and/or

(d) the amendments place the application at least into a better form for appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in §714.12 that "[a]ny amendment that would place the case either in condition for allowance or in better form for appeal may be entered." (Underlining added for emphasis) Moreover, §714.13 sets forth that "[t]he Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

EXAMINER'S RESPONSE TO ARGUMENTS:

In the Office Action, at page 2, the Examiner presented a response to Applicants' arguments filed May 4, 2007.

In view of the following arguments and amendments, the Examiner's concerns are believed to be overcome.

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REJECTION UNDER 35 U.S.C. §112:

In the Office Action, at page 3, numbered paragraphs 4-5, claim 36 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner submits that there is insufficient antecedent basis for "the RGB signal generator to detect a total maximum of the RGB color signals" in lines 1-2. This rejection is traversed and reconsideration is requested.

Claim 36 has been amended to recite, in lines 1-2: "The apparatus of claim 1, wherein the RGB color signal generator to detect detects a total maximum of the RGB color signals, compares the total maximum value... ."

Hence, claim 36 is now submitted to be in allowable form under 35 U.S.C. §112, second paragraph.

REJECTION UNDER 35 U.S.C. §103:

A. In the Office Action, at pages 3-9, numbered paragraphs 7-21, claims 1, 4-7, 9-14, and 36-38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Segal (USPN 6,791,567; hereafter, Segal) in view of Kimura (USPN 7,084,880; hereafter, Kimura). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Claim 36 has been amended for clarity.

It is respectfully submitted that the Examiner has admitted that Segal does not teach having a color temperature increased to a predetermined value, and does not disclose a system controller providing a predetermined value. In contrast, independent claims 1, 12 and 37 recite utilizing the predetermined value, i.e., have technical features of detecting a color signal having a higher maximum value than the other color signals of the RGB color signals, increasing the color temperature of the detected color signal to a predetermined value to compensate for the color temperature of the detected color signal, and adjusting both a brightness and a color temperature of a screen.

Hence, independent claims 1 and 12 are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880). Since claims 4-7, 9-11, 13-14, and 36 depend from claims 1 and 12, respectively, claims 4-7, 9-11, 13-14, and 36 are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880) for at least the reasons claims 1 and 12 are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880).

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Claim 38 has been amended to include the features of claim 37, and claim 37 has been canceled without prejudice or disclaimer.

The Examiner states that lines 62-67 of col. 1 of Segal discloses the technical feature regarding "detecting and storing a total maximum value of the RGB color signals, comparing the total maximum value with a predetermined critical value," and the Examiner submits that this feature is disclosed in claim 38 of the present invention. Lines 62-67 of col. 1 of Segal disclose the technical features of computing the maximum value of all of the color components of the pixel, and determining a maximum value of at least one color component for at least one value. However, it is respectfully submitted that neither Segal nor Kimura discloses the technical feature of detecting and storing a total maximum value of the RGB color signals. Hence, amended claim 38 of the present invention is different from, and patentable over, the combination of Segal and Kimura.

Thus, it is respectfully submitted that amended claim 38 of the present invention is patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880).

It may be helpful to review the general understandings with respect to the terminology "brightness." Hence, the following cites are included below:

At <http://hyperphysics.phy-astr.gsu.edu/hbase/vision/colchar.html>, it recites:

Hue, along with saturation and brightness make up the three distinct attributes of color. The terms "red" and "blue" are primarily describing hue. Hue is related to wavelength for spectral colors. It is convenient to arrange the saturated hues around a Newton Color Circle. Starting from red and proceeding clockwise around the circle to blue proceeds from long to shorter wavelengths. However, not all hues can be represented by spectral colors since there is no single wavelength of light which has the magenta hue - it may be produced by an equal mixture of red and blue.

There are many different mixtures of wavelengths which can produce the same perceived hue. The achromatic line from black to gray to white through the center of the Newton Color Circle represents light which has no hue.

At http://www.sapdesignguild.org/resources/glossary_color/index2.html, it recites:

Luminance is the amount of visible light that comes to the eye from a surface.

Illuminance is the amount of light incident on a surface. Reflectance is the proportion of incident light that is reflected from a surface.

Luminance, illuminance, and reflectance, are *physical* quantities that can be measured by physical devices.

There are also two *subjective* variables:

Lightness is the perceived *reflectance* of a surface. It represents the visual system's attempt to extract reflectance based on the luminances in the scene.

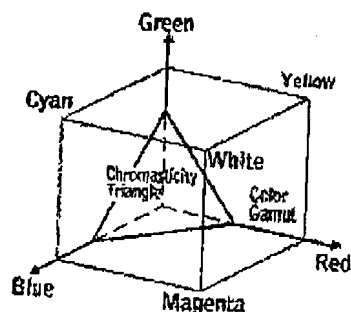
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Brightness is the perceived *intensity* of light coming from the image itself, rather than any property of the portrayed scene. Brightness is sometimes defined as perceived luminance.

At http://www.sapdesignguild.org/resources/glossary_color/index1.html, it recites:

To integrate brightness into the picture, the color triangle must be transformed from a two-dimensional triangle into a spatial body known as color space. The color space is a three-dimensional system with coordinates for red, green and blue:



The further the color loci of the primary colors from the origin, the greater the volume of the cuboid color gamut which is formed and thus the higher the quality of any color reproduction system which is based on it.

All colors lying inside the color gamut can be reproduced by a reproduction system based on the primary colors (for example a color monitor). Colors outside the color space cannot be reproduced.

In other words: the primary colors of a color space are determined by the equipment which generates them.

Hue, Saturation, Luminance (also known as Hue, Saturation, Value or Hue, Saturation, Brightness): A system for describing the physical perception of color, in terms of tint (hue, color tone), perceived narrowness of the spectrum (saturation, chroma), and luminance (brightness, value).

Hue determines the position on the color wheel or color circle, Saturation is the purity of the color, and Luminance the range of lightness to darkness of the color.

Hue can be changed by moving the position on the color circle:

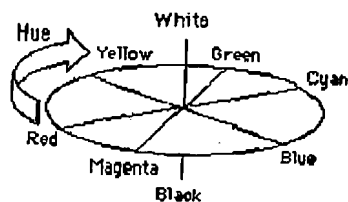


Figure: Hue changes by moving the position on the color circle

Saturation: If, for example, blue is gradually added to a yellow, mixed from red and green, the yellow goes through steps of decreasing purity, each "less chromatic."

Colors of different saturation retain their original hue since the relationship between the color values of red and green are not changed. In the color triangle, they move along the straight connecting line from the yellow color locus towards blue, whereas in the color circle increasing saturation corresponds to a radial outward movement:

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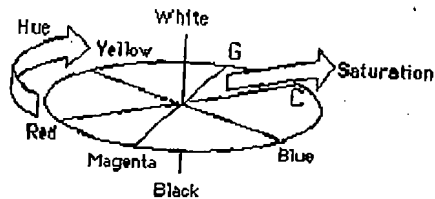


Figure: Saturation increases by moving outwards on the color circle.
Brightness

If all three color components are reduced simultaneously -- while retaining their mixing ratio -- the hue remains unchanged. The color decreases in brightness. If the components of all three primary colors are reduced to zero, the resulting color will be black. Like white, black has a saturation level of zero.

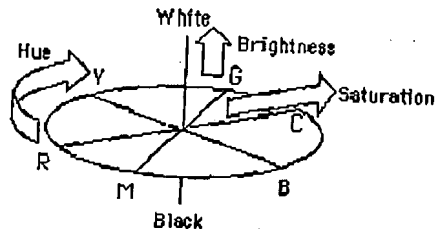
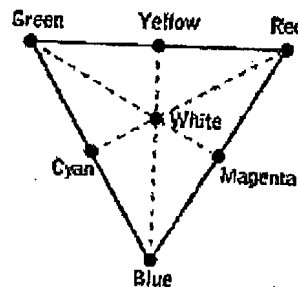
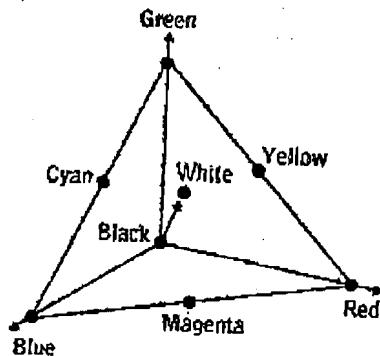


Figure: All three dimension in the color circle

Colors in the chromaticity triangle are defined by hue and saturation (chroma) only, not by brightness. There can be any amount of brightness in the chromaticity triangle.



All colors which can be produced by additive mixing of the three primary colors red, green and blue lie in the area enclosed by this color triangle. The further a color lies from the center of the triangle the higher its saturation (chroma). A mixed color has a high saturation level if it has only a small amount of its third component. A maximum saturation is found in colors mixed from only two primary colors.

If the amount of the third primary color is increased until all three primaries are present in equal components, white is the result - the saturation level is equal to zero, and the achromatic point lies in the middle of the color triangle (see color triangle above).

It should be noted that colors at a same brightness, particularly when the colors are in close proximity, may be viewed as different in brightness when the hues of the colors are different.

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The Examiner admits that Segal does not disclose having a color temperature increased to a predetermined value, and does not disclose a system controller providing a predetermined value.

It is respectfully submitted that Kimura teaches achieving a color temperature correction by controlling a hue signal with respect to a luminance value and a chroma saturation value, as is recited in the Abstract of Kumura, repeated below for the convenience of the Examiner:

A video display apparatus comprises a color temperature correction circuit which controls temperature color of an input video signal; a display device which displays an image upon basis of said video signal corrected by said color temperature correction circuit; and a signal producing circuit which obtains a hue signal from said input video signal. The color temperature correction circuit controls said hue signal corresponding to the video signal of white color attributes, which has luminance equal to or greater than a predetermined value and chroma saturation equal to or less than a predetermined value, whereby achieving the color temperature correction. (emphasis added)

Hence, it is respectfully submitted that Kimura teaches away from independent claims 1, 12 and 38 of the present invention. Thus, even if combined, Segal and Kimura do not teach or suggest independent claims 1, 12 and 38 of the present invention.

Thus, it is submitted that independent claims 1, 12 and 38 of the present invention are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880), alone or in combination. Since claims 2-7, 9-14, and 36 depend from independent claims 1 and 12 respectively, claims 2-7, 9-14, and 36 are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880), alone or in combination, for at least the reasons independent claims 1 and 12 are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880), alone or in combination.

B. In the Office Action, at pages 9-12, numbered paragraphs 22-27, claims 2, 3, and 39-41 were rejected under 35 U.S.C. §103(a) as being unpatentable over Segal (USPN 6,791,567; hereafter, Segal) in view of Kimura (USPN 7,084,880; hereafter, Kimura) and further in view of Park (US Publication 2002/0163527; hereafter, Park). The reasons for the rejection are set forth in the Office Action and therefore not repeated. The rejection is traversed and reconsideration is requested.

Independent claim 38 has been amended to include the features of claim 37. Claim 37 has been canceled without prejudice or disclaimer.

The Examiner has admitted that Segal and Kimura do not disclose the technical features that a second predetermined critical value determined in the case where the brightness level of pixels in the area corresponds to substantially full black, as is disclosed in claim 2 of the present invention. However, claim 2 incorporates the technical features of claim 1, from which claim 2 depends. It is respectfully submitted that the combination of Segal, Kimura and Park do not

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teach or suggest claim 1 of the present invention. Hence, claim 2 of the present invention is patentable over Segal, Kimura and Park for at least the reasons claim 1 is patentable over Segal, Kimura and Park.

At lines 1-4 of the Final Office Action, the Examiner submits that section 0058 of U.S. Publication 2002/0163527 (Park) discloses the technical features that a second predetermined critical value determined in the case where the brightness level of pixels in the area corresponds to substantially full black, as is disclosed in claim 2 of the present invention. However, since Kimura and Segal do not disclose a technical feature regarding the system control, and the Examiner has not asserted that Park discloses a technical feature regarding the system control, it is respectfully submitted that claim 2 is patentable over Segal, Kimura and Park.

Since claim 3 depends from claim 2, which depends from claim 1, claim 3 is patentable over Segal, Kimura and Park for at least the reasons claim 1 is patentable over Segal, Kimura and Park.

It is respectfully submitted that amended claim 38 of the present invention discloses a technical feature of detecting and storing a total maximum value of the RGB color signals, which is not taught or suggested by Segal, Kimura, and Park, alone or in combination. Thus, claim 38 and claims 39-41 which depend therefrom, are patentable over Segal, Kimura, and Park, alone or in combination, for at least the reasons amended claim 38 of the present invention is patentable over Segal, Kimura and Park, alone or in combination.

Hence, it is respectfully submitted that claim 1 and amended independent claim 38 are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880) and further in view of Park (US Publication 2002/0163527), alone or in combination. Since claims 2, 3, and 39-41 depend from independent claims 1 and 38, respectively, claims 2, 3 and 39-41 are patentable under 35 U.S.C. §103(a) over Segal (USPN 6,791,567) in view of Kimura (USPN 7,084,880) and further in view of Park (US Publication 2002/0163527), alone or in combination, for at least the reasons independent claims 1 and 38 are patentable over same.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

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If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

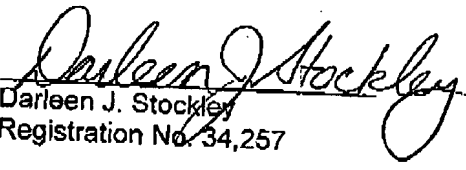
If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: October 8, 2007

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